



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/654,166	09/03/2003	William Raymond Price	01050	4307

24386 7590 08/12/2005
ROBERT W PITTS
PO BOX 11483
WINSTON-SALEM, NC 27116-1483

EXAMINER

DEL SOLE, JOSEPH S

ART UNIT PAPER NUMBER

1722

DATE MAILED: 08/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/654,166

Applicant(s)

PRICE ET AL.

Examiner

Joseph S. Del Sole

Art Unit

1722

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 15-37 is/are pending in the application.
- 4a) Of the above claim(s) 1-9, 15-21 and 27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 22-26 and 28-37 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-9, 15-21 and 27, drawn to method of manufacturing dentures, classified in class 264, subclass 220.
 - II. Claims 22-26 and 28-37, drawn to apparatus for manufacturing dentures, classified in class 425, subclass 175.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the apparatus as claimed can be used to practice another and materially different process such as injecting just a single material into the mold to form a denture-like product for teaching purposes.
3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
4. During a telephone conversation with Mr. Robert Pitts on 8/10/05 a provisional election was made without traverse to prosecute the invention of group II, claims 22-26 and 28-37. Affirmation of this election must be made by applicant in replying to this

Art Unit: 1722

Office action. Claims 1-9, 15-21 and 27 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Priority

5. This application filed under former 37 CFR 1.60 lacks the necessary reference to the prior application. The current status of all nonprovisional parent applications referenced should be included.

Specification

6. The abstract of the disclosure is objected to because **a)** the abstract currently summarizes both an apparatus and a process, but since only apparatus claims are being prosecuted the abstract should be amended to summarize only the apparatus. Correction is required. See MPEP § 608.01(b).

7. The disclosure is objected to because of the following informalities: **a)** "m114A" at line 31 of page 17 should be changed to --114A--; **b)** "two arts" at line 5 of page 22 should be changed to --two parts--.

Appropriate correction is required.

8. The specification of 9/3/03 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: the two full paragraphs of page 5, one starting at line 5 the second starting at page 19. The Examiner notes that these paragraphs were not a part of the original disclosure as provided in the parent application 10/035,885.

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Objections

9. Claim 23 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 23 fails to limit claim 22 because a flask is claimed in both claims.

Drawings

10. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: **a)** "48" as discussed at line 4 of page 13; and **b)** "169" as discussed at page 16, line 13. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance. The Examiner notes that the Applicant's amended drawings did not follow the format necessary as set forth above, particularly the lack of the label "Replacement Sheet".

Claim Rejections - 35 USC § 112

11. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

12. Claims 28-35 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 28 is vague and indefinite because lines 10-18 are grammatically awkward and unclear.

Claim Rejections - 35 USC § 102

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

14. Claims 22-26, 28 and 30-35 are rejected under 35 U.S.C. 102(b) as being anticipated by Pollock et al (5,599,491).

Pollock et al teach a mold (Figs 14) for fabricating a duplicate of an original denture including a flask; (Fig 14J, #20 and 25); a first flexible mold section; a second flexible mold section located within the flask, the first and second flexible mold sections forming at least part of a denture mold cavity in which the duplicate of the original denture is molded (Fig 14, F, #s 57 and 59); the first and second flexible mold section including sloping surfaces extending away from the mold cavity, the sloping sections including sloping surface having means for aligning the first and second flexible mold

Art Unit: 1722

sections to form the denture mold cavity (Figs 14A - 14J); the second mold section is a mold base (Fig 14F, #59) located in a flask base (Fig 14F, #25), the first mold section being removable from the flask to expose the mold cavity; the first mold section is a tissue side mold section (Fig 14F, #57 and Fig 1, within #25) and the second mold section is an exterior side mold section forming the exterior contour of denture teeth and the denture gum section (Fig 14F, #59 and Fig 1, within #20); the first and second sloping surfaces laterally align the mold section; a first flask surface on the first flask section includes an opening through which fluent material can be injected (Fig 14J); voids in the first and second mold section are concentrated adjacent flask surfaces through which fluent material can be injected; and the first flask section is a base and the second flask section is a cover attachable to the base, the volume of the base being sufficient to house the first and second mold sections and the denture mold cavity.

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

Art Unit: 1722

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

17. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

18. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pollock et al (5,599,491) in view of (Bakanowski (5,324,186).

Pollock et al teach the apparatus as discussed above.

Pollock et al fail to teach a second opening.

Bakanowski teaches multiple drilled openings through which fluent material can be injected to form sections so that different materials may be molded (col 3, lines 58-68).

It would have been obvious to one having ordinary skill in the art at the time of the Applicant's invention to have modified the invention of Pollock et al with multiple openings as taught by Bakanowski because it enables a wider range of materials, including both first and second material use in a single formation.

19. Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pollock et al (5,599,491) in view of Cialone (4,521,193).

Art Unit: 1722

Pollock et al teach the apparatus as discussed above including a fluent porable material.

Pollock et al fail to teach the mold being part of a kit including a solid material conformable to one surface of an original denture.

Cialone teaches a kit for fabricating a mold for using in duplicating an original denture, the kit having a solid material conformable to one surface of an original denture (Fig 1); and a solid material having malleable material removable from the flask after the fluid material solidifies to form a first mold section for the purpose of easily replicating dentures to form a temporary denture.

It would have been obvious to one having ordinary skill in the art at the time of the Applicant's invention to have modified the invention of Pollock et al by including the mold as part of a kit and including solid material as taught by Cialone because it enables a dentist to possess all of the necessary proponents for duplicating dentures.

20. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pollock et al (5,599,491) in view of Cialone (4,521,193) and further in view of (Bakanowski (5,324,186).

Pollock et al and Cialone teach the apparatus and kit as discussed above.

Pollock et al fail to teach a second opening.

Bakanowski teaches multiple drilled openings through which fluent material can be injected to form sections so that different materials may be molded (col 3, lines 58-68).

Art Unit: 1722

It would have been obvious to one having ordinary skill in the art at the time of the Applicant's invention to have modified the invention of Pollock et al with multiple openings as taught by Bakanowski because it enables a wider range of materials, including both first and second material use in a single formation.

References of Interest

21. Kimura (5,151,279), Drennan et al (4,195,047) and Diasti et al (6,224,375) are cited of interest to show the state of the art.

Correspondence

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Joseph S. Del Sole whose telephone number is (571) 272-1130. The examiner can normally be reached on Monday through Friday from 8:30 A.M. to 5:00 P.M.

If attempts to reach the Examiner by telephone are unsuccessful, Mr. Duane Smith can be reached at (571) 272-1166. The official fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306 for both non-after finals and for after finals.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from the either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on the access to the Private PAIR system, contact the Electronic Business Center (EBC) at 886-217-9197 (toll-free).



Joseph S. Del Sole
August 10, 2005